# Shashank Gupta

***Skills***

* ***Programming Languages:*** C, C++, C#, Java, Python, Go
* ***Technical Skills***: SASE (Secure Access Service Edge), SWG (Secure Web Gateway), ZTNA (zero trust network access), Proxy engine, Security Policy engine, Sandboxing, Wireshark, Fiddler, ML (Machine Learning), AI (Artificial Intelligence), XGBoost, LightGBM, GluonTS, MXnet, Lime, SHAP, AWS, GCP
* ***Platform***: Linux, FreeBSD, Windows

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***Staff Software Engineer*, Lookout June 2022 - Present**

* Working on Proxy Engine, Policy Engine, **SASE, ZTNA** and cloud security as a part of the infrastructure development team. Multi-port support for ZTNA applications. Sandboxing, DLP and Network Layer (Firewall) policies implementations. **Platform**: AWS **Language**: Java

***Senior Software Engineer*, Arkose Labs Jan 2022 - June 2022**

* Arkose Labs provides fraud prevention, anti-spam, and abuse analysis for businesses and companies
* **Detection team (Tech Owner):** Developed Traffic Shaper product that uses device fingerprinting patterns to forecast traffic through Machine Learning to prevent volumetric DDOS attack by botnets that are coming with spoofed real device fingerprints.

**Platform**: AWS, Docker, Airflow **Language**: Go **ML-library:** GluonTS and MXnet

***Staff Software Engineer*, Zscaler December 2017 - December 2021**

* **Worked on Zscaler Cloud Sandbox (Zero-day malware detection system)**. I work on infrastructure and features development along with a security research team to improve malware detection accuracy**.**
* **Worked on backend infrastructure for Machine learning and Artificial intelligence on zscaler cloud.** Developed Dynamic Content Categorization(web based content), File based Malware (exe/vba) detection and Phishing Detection using Machine Learning algorithms. **Accuracy** 78% Recall 32%

**Language**: C/C#/python/Java **ML library**: SVM, XGBoost, LightGBM, Lime, SHAP

**Patent:** Machine learning model abstraction layer for runtime efficiency (US11475368B2)

***Software Engineer*, Commvault Systems April 2016 - December 2017**

* **Worked in Windows Server Team** on Jobs Management and parallel scheduling framework on Commvault Server for tasks to be distributed across the cluster. **Language**: C++/python
* **Developed Secrets Management/Sharing module** to create/share/version/access-control the secrets centrally based on user/groups for all distributed agents.

***Software Engineer*, Dell-EMC, Advanced Storage Division Feb 2015 - March 2016**

* **Worked on Isilon scale-out distributed NAS FileSystem (OneFS) team** on Jobs Management framework on File-System Server. Job Engine is a parallel task scheduling framework and is responsible for the creation, scheduling, managing, distribution, execution and impact management of critical jobs and operations across the entire distributed cluster. **Language**: C/C++ **Platform**: Linux, FreeBSD

***Software Development Intern*, Commvault Systems May 2014 - August 2014**

* **Worked in the FileSystem team.** Improved Cache performance of vm restore jobs through NFS by 20% with LRU based persistent cache. **Language**: C/C++

***Software Engineer*, Zscaler July 2011 - July 2013**

* Worked on Zscaler Proxy Engine as a part of the infrastructure development team. Worked on security policy enforcement engine. **Language**: C/C++

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# ACADEMIC QUALIFICATION

* ***Masters in Computer Science***, State University of New York, Stony Brook, NY
* ***Bachelor in Computer Science***, Thapar University, India.